

Los Angeles County Proposed Facility at Cogen Landfill Community Meeting

South Coast Air Quality Management
District

November 14, 2019
City Terrace Park

Tonight's Agenda

- Welcome
- Introduction
- Project Description
- Permitting Process
- Public Notification Process
- Requirements
- How to Make a Complaint
- How to Stay Informed
- Permitting Contacts
- Q & A

What is South Coast Air Quality Management District?

- The local Air Pollution Control Agency in Southern California
 - All of Orange County & non-desert portions of Los Angeles, Riverside & San Bernardino Counties
- Home to 17 million people (about half of CA population)
- Has worst air quality in the nation (Ozone & PM_{2.5})
- Regulates over 27,000 stationary sources

South Coast AQMD

At South Coast AQMD, we:

- Monitor and forecast air quality
- Adopt local rules and regulations
- Implement state and federal requirements
- Regulate Stationary Sources



LA County – Cogen Landfill Proposed Equipment Location

Address: 2001-1/2 Sheriff Road, Los Angeles, CA 90063



Aerial View



Former Cogen Landfill

- Cogen Landfill started operation 1951 and closed in 1959.
- Believed to have received 1-2 million cubic yards of waste, including household, commercial, & industrial waste.
- LA County owns portion west of Sheriff Road of the landfill (approx. 12% of landfill area).
- Crown Enterprises Inc. owns largest portion of landfill (approx. 71%) and is currently operating a gas collection & control system similar to the one proposed by LA County CEO.
- Bar v Bar LLC owns the eastern portion along the 710 of the landfill (approx. ~17% of landfill area).

LA County's Proposed System

LA County is proposing to install and operate a:

- Landfill gas collection and control system (extraction wells and carbon adsorbers)
- Landfill gas condensate collection, storage and control system (carbon adsorber)

Landfill Gas Collection and Control System

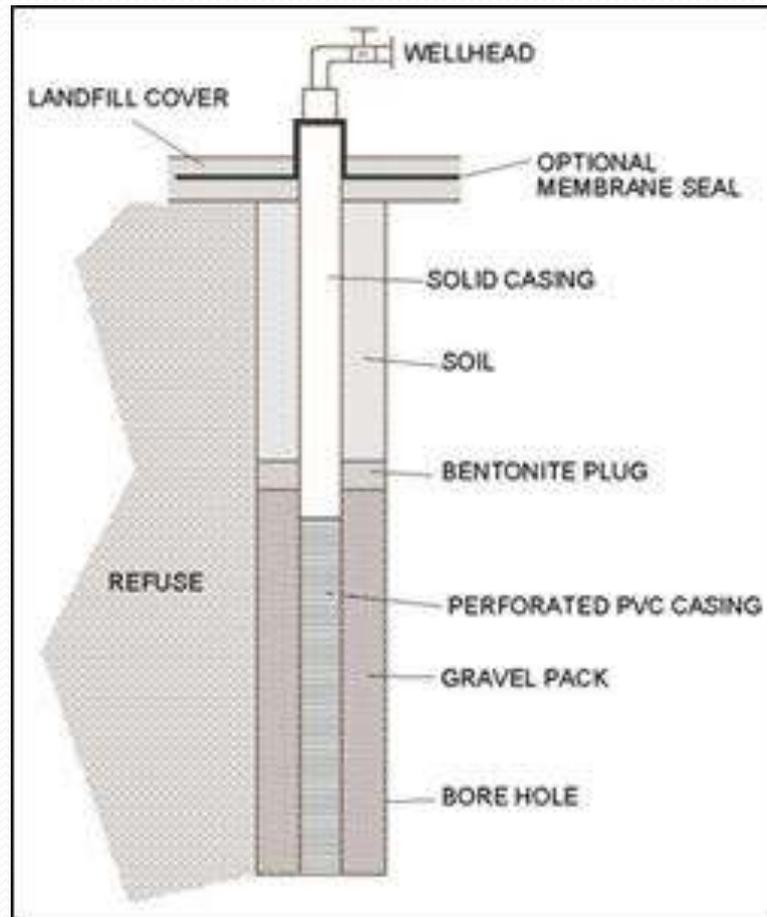
Purpose:

- The Landfill Gas Collection System - extracts gas produced from the natural decomposition of the waste
- The Carbon Adsorber System - treats Volatile Organic Compounds (VOC) and Toxic Air Contaminants (TAC) in the extracted gas (two carbon vessels in series)

Landfill Gas Collection System

- Extraction Wells – up to four vertical and one horizontal wells. The extraction wells are installed into waste material to allow for collection of the landfill gas.
- Collection Header – routes the collected landfill gas from the extraction wells to the control system.

Landfill Gas Collection System Extraction Well

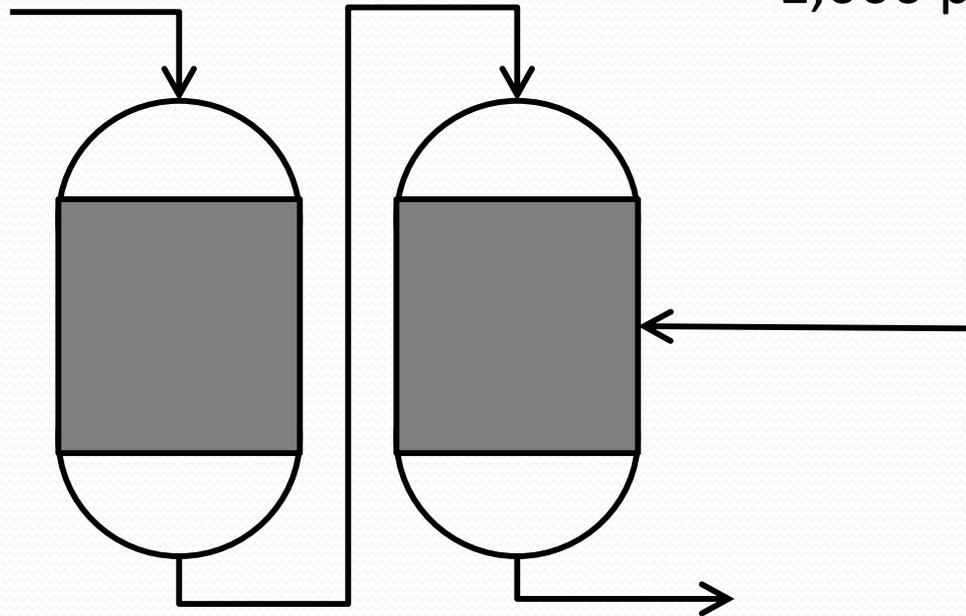


Landfill Gas Control System

- Blower – generates the vacuum to pull landfill gases into the collection system and pushes the gases through the control system.
- Carbon Adsorbers – two adsorbers, connected in series, each containing 1000 pounds of granular activated carbon to control emissions and odors.

Landfill Gas Control System Carbon Adsorbers

GAC Adsorbers



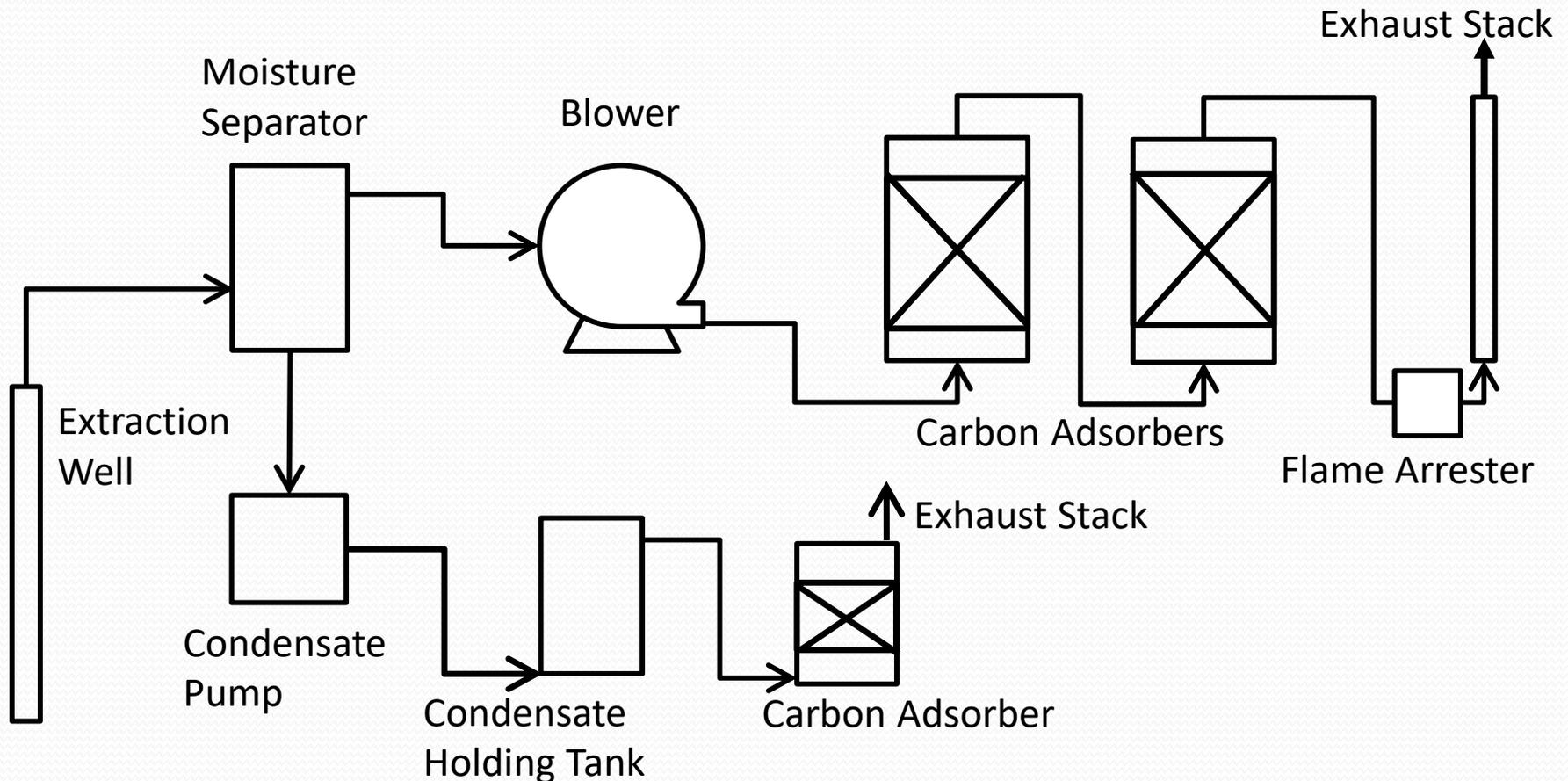
Granular Activated Carbon (GAC)
1,000 pounds of GAC in each adsorber



Landfill Gas Condensate Collection and Control System

- Condensate is a liquid that develops in the gas collection system due to cooling and is mostly water.
- Gas and liquid is separated in a Moisture Separator.
- The liquid will be collected in a sealed storage tank (500 gallons) vented passively to a carbon adsorber (100 pounds) to remove odors and VOCs if present.

Proposed Landfill Gas Collection, Control and Condensate System



South Coast AQMD Permitting Process

Compliance with South Coast AQMD's Rules & Regulations:

- Prevention of visible emissions and nuisance (Rules 401 & 402)
- Emission Limits and monitoring requirements for VOC emissions from landfills (Rule 1150.1)
- Installation of Best Available Control Technology (Rule 1303)
- Control of toxic air contaminants (Rule 1401)
- Issuance of Public Notice (Rule 212)

Public Notification Process

South Coast AQMD Rule 212 - Standards for Approving Permits and Issuing Public Notice requires the local community to be notified when an application for a permit is received for a new or modified facility that meets any one of the following criteria:

- Emits any air contaminants within 1,000 feet from the outer boundary of a school.
- Results in emission increases exceeding any one of the following daily maximums:

Volatile Organic Compounds	30 pounds per day
Nitrogen Oxides	40 pounds per day
Fine Particulates	30 pounds per day
Sulfur Dioxide	60 pounds per day
Carbon Monoxide	220 pounds per day
Lead	3 pounds per day

- Produces on-site emissions of toxic air contaminants for which a determination has been made that a person may be exposed to a health risk greater than one in a million during a lifetime (30 years), or may be exposed to quantities or concentrations of other substances that pose a potential risk for nuisance.

Proposed Permit Requirements

- Requires proper operation and maintenance of the proposed equipment.
- Limits maximum non-methane Volatile Organic Compound (VOC) emissions .
 - concentration or capture efficiency - 20 ppmv or 98%
 - Total emission – 0.97 pounds per day
- Requires monitoring, recordkeeping and testing to ensure limits are met.
 - Landfill surface, wells, and carbon adsorber(s)

Emission Comparison

Type of Operation	Volatile Organic Compound Emissions (pounds per day)
Proposed Cogen Project	0.97
Typical Gas Station	13 - 21

Emission are expected to decrease over time as the system operates.

Receptor Locations for Health Risk Analysis



Estimated Health Risk Analysis

Maximum Individual Cancer Risk (MICR)	Proposed Project	Allowable Limit
Residential Receptor	0.436 in a million	1 in a million
Commercial Receptor	0.00847 in a million	1 in a million
School Receptor	0.0140 in a million	1 in a million
Hazard Indices	Proposed Project	Allowable Limit
Acute Hazard Index	0.0281	1.0
Chronic Hazard Index	0.0984	1.0

Monitoring and Recordkeeping Requirements

Requirement	Interval
Subsurface Boundary Probe Samples	Monthly
Integrated Surface Samples	Monthly
Instantaneous Surface Monitoring	Quarterly
Wellhead Monitoring	Monthly
Landfill Gas Samples	Monthly
Ambient Air Samples	Monthly
Monitoring of LFG Control System	Weekly (first 2 months)/Monthly
Source Test of LFG Control System	Annually
Leak Checks for Components Containing LFG	Quarterly
Quarterly Reports	Quarterly
Annual Reports	Annually

Odors and Dust Concerns

Operation of this equipment is not expected to cause any odor or dust problems.

How to Make an Air Quality Complaint

- 1-800-CUT-SMOG (1-800-288-7664)
- Submit complaints online:
<http://www.aqmd.gov/nav/online-services/complaints>
- Apple iOS and Android phone 'apps' available

How to Stay Informed

- Report air quality problems: 1-800-CUT-SMOG (1-800-288-7664)
- Sign up for Daily Pollution Air Alerts:
<http://aqmd.enviroflash.info/signup.cfm>
- Air Quality Forecast Information:
<http://www.aqmd.gov/home/air-quality/air-quality-forecasts>
- Get more information
 - Facility Information Detail (FIND):
<http://www.aqmd.gov/nav/FIND/facility-information-detail>
 - Public Records Information:
<http://www.aqmd.gov/nav/online-services/public-records>

South Coast AQMD Contacts

For permitting questions regarding this project, please contact:

Bhaskar Chandan, Senior Engineering Manager

(909) 396-3902

bchandan@aqmd.gov

Angela Shibata, Supervising Engineer

(909) 396-2737

ashibata@aqmd.gov



QUESTIONS AND ANSWERS